IN THE SPECIFICATION:

On page 30 of the specification, please amend the Abstract beginning at line 4 as follows:

A system and method are provided for securely buffering overhead messages in a network-connected integrated circuit. The method comprises: receiving messages including overhead bytes; collecting overhead bytes; creating a first overhead message from the collected overhead bytes; establishing a overhead message semaphore; and, saving the first overhead message until it is read, in response to the semaphore. Saving the first overhead message until it is read means not overwriting the first overhead message stored in the buffer until the buffer is read. Not overwriting the first overhead message stored in the buffer until the buffer is read includes the substeps of: setting the semaphore to the lock state; and, in response the semaphore lock state, not writing collected overhead bytes for a second overhead message to the buffer.

The method further comprises: reading the first overhead message in the buffer; collecting new overhead bytes; creating a second overhead message from the collected new overhead bytes; and, saving the second overhead message until it is read. Collecting overhead bytes for the second overhead message includes the substeps of: setting the semaphore to the unlock state following the reading of the first overhead message; and, collecting a first number of overhead bytes from a second number of frames.